AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method[[,]] comprising:

installing a program onto a target machine, the program having an intermediate representation;

executing the program using the intermediate representation and an initial profile data; generating a current profile data;

comparing the current profile data with the initial profile data; and

recompiling the intermediate representation to optimize the program when the current profile data in comparison with the initial profile data has exceeded a predetermined threshold.

2. (Previously Presented) The method of claim of claim 1, wherein installing further comprises:

installing a continuous compiler;

installing a runtime monitor;

copying the intermediate representation to the target machine;

building the initial profile data; and

Attorney Docket No.: 42390P8130 Application No.: 09/608,616 compiling the intermediate representation to create an executable file.

3. (Previously Presented) The method of claim 1, wherein executing further comprises:

running an executable version of the program;

collecting samples of process information at a controlled rate; and

while the target machine is idle, generating binary level and high level profiles.

4. (Previously Presented) The method of claim 1, wherein recompiling further comprises customizing compiler optimizations based on the current profile data generated during program execution.

Claims 5-10 (Cancelled)

11. (Currently Amended) A machine-readable medium having stored thereon instructions

that when executed cause a machine to: [[A machine-readable medium having stored

thereon data representing sequences of instructions, the sequences of instructions which,

when executed by a machine, cause the machine to]]:

install [[installing]] a program onto a target machine, the program having an intermediate

representation;

execute [[executing]] the program using the intermediate representation and an initial

profile data;

generate [[generating]] a current profile data;

compare [[comparing]] the current profile data with the initial profile data; and

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recompile [[recompiling]] the intermediate representation to optimize the program when the current profile data in comparison with the initial profile data has exceeded a predetermined threshold.

12. (Currently Amended) The machine-readable medium of claim 11, wherein the instructions to install [[installing]] further [[comprises]] comprise instructions that when executed cause the machine to:

install [[installing]] a continuous compiler;

install [[installing]] a runtime monitor;

<u>copy</u> [[copying]] the intermediate representation of to the target machine;

build [[building]] the initial profile data; and

<u>compile</u> [[compiling]] the intermediate representation to create an executable file.

13. (Currently Amended) The machine-readable medium of claim 11, wherein the instructions to execute [[executing]] further [[comprises]] comprise instructions that when executed cause the machine to:

<u>run</u> [[running]] an executable version of the program;

collect [[collecting]] samples of process information at a controlled rate; and

while the target machine is idle, generate [[generating]] binary level and high level profiles.

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(Currently Amended) The machine-readable medium of claim 11, wherein the 14. instructions to recompile [[recompiling]] further [[comprises]] comprise instructions that when executed cause the machine to

customize [[customizing]] compiler optimizations based on the current profile data generated during program execution.

Claims 15-20 (Cancelled)

21. (Currently Amended) A system[[,]] comprising:

> a target machine having a storage device, the storage device having stored therein a routine for transparent continuous compilation; and

a processor coupled with the storage device, the processor to:

install a program onto the target machine, the program having an intermediate representation and a continuous compiler;

execute the program using the intermediate representation and an initial profile data;

generate a current profile data;

compare the current profile data with the initial profile data; and

recompile the intermediate representation to optimize the program when the current profile data in comparison with the initial profile data has exceeded a predetermined threshold.

22. (Previously Presented) The system of claim of claim 21, wherein installation further comprises:

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installing a continuous compiler;

installing a runtime monitor;

copying the intermediate representation to the target machine;

building the initial profile data; and

compiling the intermediate representation to create an executable file.

23. (Previously Presented) The system of claim 21, wherein execution further comprises:

running an executable version of the program;

collecting samples of process information at a controlled rate; and

while the target machine is idle, generating binary level and high level profiles.

24. (Previously Presented) The system of claim 21, wherein recompilation further comprises

customizing compiler optimizations based on the current profile data generated during

program execution.

Claims 25-30 (Cancelled)

31. (Currently Amended) An apparatus[[,]] comprising:

a storage medium,

a processor coupled with the storage medium, the processor to:

install a program onto the target machine, the program having an intermediate

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representation;

Attorney Docket No.: 42390P8130 Application No.: 09/608,616 execute the program using the intermediate representation and an initial profile data; generate a current profile data;

compare the current profile data with the initial profile data; and

recompile the intermediate representation to optimize the program when the current profile data in comparison with the initial profile data has exceeded a predetermined threshold.

32. (Previously Presented) The apparatus of claim of claim 31, wherein installation further comprises:

installing a continuous compiler;

installing a runtime monitor;

copying the intermediate representation to the target machine;

building the initial profile data; and

compiling the intermediate representation to create an executable file.

33. (Previously Presented) The apparatus of claim 31, wherein execution further comprises:

running an executable version of the program;

collecting samples of process information at a controlled rate; and

while the target machine is idle, generating binary level and high level profiles.

- (Previously Presented) The apparatus of claim 31, wherein recompilation further 34. comprises customizing compiler optimizations based on the current profile data generated during program execution.
- 35. (Previously Presented) The apparatus of claim 34, wherein customizing compiler optimizations is performed using annotations in a high level representation of an executable program which relate portions of the executable to the high level representation.

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